

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A computer implemented method for dynamically composing and maintaining applications over a computer architecture comprising:
receiving an indication to dynamically integrate a component into an executing application, wherein the component includes a new component to replace an existing component;
loading the component; ~~and~~
linking the component to the application by~~[[;]]~~
obtaining the component's integration interface, the integration interface comprising methods for managing the component~~,[[;]]~~ and
invoking an initialize method of the integration interface; and
invoking a replace method of the integration interface, the replace method to transition an existing state of the existing component into the new component.
2. (Cancelled)
3. (Currently Amended) The method of claim 1, further ~~additionally~~ comprising supporting the component's ability to allow other components to communicate with it by:
invoking a publish method of the integration interface and specifying one or more
interfaces to publish to other components; and
storing the one or more interfaces in an interface clearinghouse.

4. (Currently Amended) The method of claim 3, further ~~additionally~~ comprising supporting the component's ability to communicate with other components by: consulting the interface clearinghouse to determine one or more interfaces to retrieve from other component; invoking a retrieve method of the integration interface and specifying an interface of the one or more interfaces to retrieve from other component; and using the retrieved interface to communicate with other components.
5. (Currently Amended) The method of claim 1, further ~~additionally~~ comprising invoking a stop method of the integration interface when the component is ready to be shut down.
6. (Currently Amended) The method of claim 1, wherein the application resides ~~is in~~ a network, and the said-loading of the component comprises retrieving the component from a member in the network.
7. (Original) The method of claim 6, wherein the member comprises a peer.
8. (Original) The method of claim 7, wherein the peer comprises another component loader in the network.
9. (Original) The method of claim 6, wherein the member comprises a host in the network.

10. (Currently Amended) An apparatus comprising:
a client computer system; and
a server computer system coupled with the client computer system, the server
computer system including
a component loader to load requested components of a plurality of
components into an application, the plurality of components
corresponding to an application, and each implementing an
integration interface having
a number of methods for managing loaded components,¹[[;]]
an initialize method to transition a given component into a state to
operate, and
a stop method to transition the given component into a destroy
state,
an interface clearinghouse to store and manage interfaces corresponding to
the loaded components,¹[[;]] and
a messaging mechanism for external entities to communicate with the
loaded components.
11. (Cancelled)
12. (Currently Amended) The apparatus of claim 11, ~~additionally wherein the server~~
computer system further comprises ~~comprising~~ a replace state to replace an old
component with a new component by transitioning an existing state of the old
component to the new component.

13. (Currently Amended) The apparatus of claim 10, wherein the application resides ~~is~~-in a network, and the said-loading of the component further comprises retrieving the component from a member in the network.
14. (Currently Amended) A system comprising:
a storage device;
a client computer system coupled with the storage device; and
a server computer system coupled with the client computer system, the server
computer system including
an integration interface having a plurality of methods for managing a
component₁[[;]]
at least one component that implements the integration interface₁[[;]]
a components repository for storing the at least one component₁[[;]]
a communications bus, wherein the communication bus is established after
at least one call to a publish method and a retrieve method of the
integration interface, and
a component framework corresponding to an application to manage the at
least one component using the integration interface, the component
framework having[[;]]
a component loader to load requested components from the
components repository into an application₁[[;]]
an interface clearinghouse to store and manage interfaces
corresponding to the loaded components₁[[;]] and

a messaging mechanism for external entities to communicate with
the loaded components.

15. (Currently Amended) The system of claim 14, ~~additionally comprising a wherein~~
the communication bus is to facilitate for inter-component components
communication.
16. (Cancelled)
17. (Currently Amended) The system of claim 14, wherein the application resides is
in a network, and the said-loading of the component comprises retrieving the
component from a member in the network.
18. (Currently Amended) A machine-readable medium having stored thereon data
representing sets sequences of instructions, the sets sequences of instructions
which, when executed by a machine processor, cause the machine processor to:
receive an indication to dynamically integrate a component into an executing
application, wherein the component is a new component;
load the component; ~~and~~
link the component to the application by~~[[:]]~~
obtaining the component's integration interface, the integration interface
comprising methods for managing the component,[[:]] and
invoking an initialize method of the integration interface; and

replace an existing component by invoking a replace method of the integration interface, the replace method to transition an existing state of the existing component into the new component.

19. (Cancelled)
20. (Currently Amended) The machine-readable medium of claim 18, the sets of instructions causing the machine processor to further ~~additionally~~ support the component's ability to allow other components to communicate with it by:
invoking a publish method of the integration interface and specifying one or more
interfaces to publish to other components; and
storing the one or more interfaces in an interface clearinghouse.
21. (Currently Amended) The machine-readable medium of claim 20, the sets of instructions causing the machine processor to further ~~additionally~~ support the component's ability to communicate with other components by:
consulting the interface clearinghouse to determine one or more interfaces to
retrieve from other component;
invoking a retrieve method of the integration interface and specifying an interface
of the one or more interfaces to retrieve from other component; and
using the retrieved interface to communicate with other components.
22. (Currently Amended) The machine-readable medium of claim 18, wherein the application resides ~~is~~ in a network, and the said ~~loading of~~ the component

comprises retrieving the component from a member in the network.

23. (Currently Amended) An apparatus comprising:

at least one processor; and

a machine-readable medium having instructions encoded thereon, which when

executed by the processor, are capable of directing the processor to[[:]

receive an indication to dynamically integrate a component into an

executing application, wherein the component is a new

component,[[:]]

load the component,[[:]] ~~and~~

link the component to the application by[[:]]

obtaining the component's integration interface, the integration

interface comprising methods for managing the

component,[[:]] and

invoking an initialize method of the integration interface, and

replace an existing component by invoking a replace method of the

integration interface, the replace method to transition an existing

state of the existing component into the new component.

24. (Cancelled)

25. (Currently Amended) The apparatus of claim 23, the instructions causing the

processor to further ~~additionally~~ support the component's ability to allow other

components to communicate with it by:

invoking a publish method of the integration interface and specifying one or more interfaces to publish to other components; and
storing the one or more interfaces in an interface clearinghouse.

26. (Currently Amended) The apparatus of claim 25, the instructions causing the processor to further ~~additionally~~ support the component's ability to communicate with other components by:
- consulting the interface clearinghouse to determine one or more interfaces to retrieve from other component;
- invoking a retrieve method of the integration interface and specifying an interface of the one or more interfaces to retrieve from other component; and
- using the retrieved interface to communicate with other components.
27. (Currently Amended) An apparatus comprising:
- means for loading requested components of a plurality of components into an application, the plurality of components corresponding to an application, and each implementing an integration interface having a number of methods for managing loaded components, wherein the integration interface including
- means for transitioning a given component into a state to operate, and
- means for transitioning the given component into a destroy state;
- means for storing and managing interfaces corresponding to the loaded components; and
- means for external entities to communicate with the loaded components.

28. (Cancelled)
29. (Currently Amended) The apparatus of claim 27, further ~~additionally~~ comprising means for replacing an old component with a new component by transitioning an existing state of the old component to the new component.
30. (Currently Amended) The apparatus of claim 27, wherein the application resides ~~is~~ in a network, and the ~~said~~ means for loading the component comprises means for retrieving the component from a member in the network.